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## MANNING THE READY RESERVE FORCE

by

Frank J. Flyntz  
GM-15, U.S. Coast Guard

June 1992

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information gleaned from government databases available to the author.

The chief findings of the study are that a quantitative and qualitative manning problem exists and is becoming worse. The problem is greatly exacerbated by present procedures for distributing the manpower. Solutions have been proposed to increase available manpower. These include a civilian reserve program, Navy Reserve manning and programs to enhance the present system.

The conclusions are that it is possible to estimate the number of RRF ships that can be manned by the commercial manning pool existing at any one time. The remainder of the RRF fleet will have to be manned by some other means, probably by a combination of several means. The RRF is a large fleet and requires some form of personnel management.

The recommendations arrived at are to recognize that commercial manning is most desirable and take measures to improve its application to the RRF. Determine how much of the RRF can be manned by commercial means and develop other means to man the rest. Use existing reserve programs to man part of the RRF and develop a civilian reserve to man the remainder. To make each of these programs more effective they have to be accompanied by more effective personnel management practices.

NAVAL WAR COLLEGE  
Newport, R.I.

MANNING THE READY RESERVE FORCE

by

DTIC QUALITY INSPECTED 3

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A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Advanced Research Department.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

Signature: 

19 June 1992

Paper directed by  
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Department of National Security Decision Making

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## ABSTRACT

Sealift is needed for National Defense. The best source of sealift is a healthy Merchant Marine. The U.S. Merchant Marine is in a serious downward spiral, to make up for the lack of available commercial ships the RRF ( a subset of the NDRF ) was created. These ships are laid up in increased states of readiness and are dependent on the existing pool of available merchant mariners for manning. Unfortunately as the Merchant Fleet declines mariners available to man the RRF also dwindles, until now there is serious doubt that there are sufficient mariners available to provide crews for the RRF.

Numerous studies of this problem have been based on statistics, exercises and speculation. The activation of the RRF for Desert Shield/Desert Storm involved 80% of the ships and was the only real exercise of the RRF to date. Lessons learned from Desert Shield/Desert Storm bear on the validity of the previous studies and the conclusions drawn.

This paper will consider only the issue of manning for the RRF in it's present and planned size. The research involves published and unpublished documents relating to the RRF and information gleaned from government databases available to the author.

The chief findings of the study are that a quantitative and qualitative manning problem exists and is becoming worse. The problem is greatly exacerbated by present procedures for distributing the manpower. Solutions have been proposed to increase available manpower. These include a civilian reserve program, Navy Reserve manning and programs to enhance the present system.

The conclusions are that it is possible to estimate the number of RRF ships that can be manned by the commercial manning pool existing at any one time. The remainder of the RRF fleet will have to be manned by some other means, probably by a combination of several means. The RRF is a large fleet and requires some form of personnel management.

The recommendations arrived at are to recognize that commercial manning is most desirable and take measures to improve its application to the RRF. Determine how much of the RRF can be manned by commercial means and develop other means to man the rest. Use existing reserve programs to man part of the RRF and develop a civilian reserve to man the remainder. To make each of these programs more effective they have to be accompanied by more effective personnel management practices.

## PREFACE

I have been associated with the Merchant Marine since my first day in uniform as a cadet at the State University of New York, Maritime College in 1963. My career as a cadet was cut short by early graduation in 1967, it seems that we were needed for the Vietnam sealift. My first two ships were from the National Defense Reserve Fleet (NDRF), the SS HALCYON TIGER (a Victory Ship) and the SS BENJAMIN CHEW (a Liberty Ship).

After active duty in the U.S. Navy as a Naval Flight Officer and then as a Navigation and Seamanship Instructor at the U.S. Naval Academy I found myself again involved with the Merchant Marine on the faculty of the Maritime Institute of Technology and Graduate Studies. During that time my Naval Reserve career turned toward sealift when I was assigned to the Merchant Marine Reserve Operational Command Headquarters Unit in Washington, D.C. I am now employed as the Assistant Chief of Merchant Vessel Personnel Division at U.S. Coast Guard Headquarters.

Throughout my career I have had an interest in the Merchant Marine and appreciate the chance to study one of its most perplexing problems in more depth. I was surprised by the number of studies that have been done on this relatively narrow subject. The only thing more amazing than the number of studies is the lack of action. I am not sanguine enough to think that a twelve week study can make a difference in policy, especially in light of the talent, effort and resources that have already been directed at the problem. It is my hope that the ideas expressed in this paper will provide others with areas to pursue.

As with any other project of this type I was helped by numerous people. I would like to thank the following faculty and staff members of the Naval War College: Commander Scott Ensminger, USN for sponsoring this project; the Advanced Research Department staff, especially Lieutenant Commander John C. Benigno, USN and Ms. Barbara A. Prisk for their administrative support; and, Captain Tom Lawler, USN and Commander Chuck Sipe, USN kindred spirits on the faculty who encouraged me to pursue this project. Every government agency that I asked for assistance in gathering information was extremely helpful. Specifically the following provided invaluable support: U.S. Coast Guard, Ms. Justine Bunnell and Mr. Harold Krevait; Maritime Administration, Mr. Bruce Carlton; U.S. Navy, Military Sealift Command, Ms. Carleen Kolpa; OP-42, Captain Joseph Stone, USNR; and, Merchant Marine Program Office, Lieutenant Commander Paul Fermoile and Petty Officer Jenkins.

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## CHAPTER I

### INTRODUCTION

The ability to project military power to virtually anywhere in the world is vital to the overall strategy of the United States. Recent changes to the world situation, mainly the collapse of the Soviet Union, have caused a change in strategy from one of containment to one requiring the ability to selectively project power to any place where a crisis situation could develop.

"With the collapse of the Warsaw Pact and the advent of the post-Cold War era, U.S. military requirements for sealift, like all U.S. military requirements, are now being reexamined. There is a consensus among military analysts that the United States in the post-Cold War era will require an ability to deploy forces rapidly to distant parts of the world."<sup>1</sup>

The projection of power in this manner requires sealift. If anything, the new world situation requires more flexibility than the previous situation where the planners were faced with a more stable and predictable world. The need for increased flexibility will require more reliance on sealift.

The need for sealift is well documented. The number of studies on this subject is staggering and no intelligent person could come to any conclusion other than: the United States needs a sealift capability to accomplish it's regional strategy. To appreciate this fact a brief discussion of the role of sealift

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<sup>1</sup>. Congressional Research Service, The Library of Congress, Sealift and Operation Desert Shield, (Washington: September 17, 1990), p.CRS-11



is helpful. In the recent Gulf War, 95% of the dry cargo was delivered by sea, and 99% of the bulk cargo was delivered by sea. Only the people, the troops themselves, were primarily transported by air. Yet, despite bearing the lion's share of the burden, sealift is a stepchild of our national policy. There is serious talk of millions of dollars for new airlift assets<sup>2</sup> while borderline maintenance funds for sealift assets have been reduced<sup>3</sup>.

In part the problem has been exacerbated by the false hope that a healthy United States Merchant Marine will provide the sealift necessary. It is a fact that the gallant U.S. Merchant Marine provided the necessary service during most of the nation's conflicts. Historically, the contribution of our professional mariners has been ignored. This was certainly true of World War II, where recognition was only forthcoming over forty years later.

The contribution of these Merchant Mariners is worth reviewing. During World War II the Merchant Marine was essentially another arm of defense. The industry is very proud of their tradition of service of which this patriotic action represents their finest hour. However, in many ways these

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<sup>2</sup>. Ibid., pp. CRS-12,13, Based on the Administration's proposed FY 1991 defense budget, which requests funding for 6 C-17's at a cost of about \$300 million per plane.

<sup>3</sup>. Joint Department of Defense/Department of Transportation Ready Reserve Force Working Group, The Ready Reserve Force: Enhancing a National Asset, (Washington: 23 October 1991), p. 3-13

accomplishments have gone unrewarded, a reality that has not gone unnoticed by the majority of merchant mariners.

About 250,000 served during World War II. Of these nearly 5662 perished and 572 were taken prisoner<sup>4</sup>. Their casualty rate is, as a percentage of those who served in combat, second only to that of the U.S. Marine Corps. The United States was able to prevail in World War II, in large part, because of the overwhelming abundance of material delivered to the fronts. This wouldn't have been possible without the Merchant Marine. Despite these facts, the accomplishments of this group as a matter of course, have often been overlooked and forgotten.

Public Law 95-202 was designed to provide recognition for civilian groups who significantly contributed to the war effort and therefore deserved recognition. The Act provides that deserving civilians will receive most of the same veterans benefits as those who served in the armed forces. The first group considered under the Act was the Women Air Service Pilots (WASPs). The WASPs were granted veteran's benefits, and the Civilian Military Review Board headed by the Air Force, was established. Other groups, such as the Wake Island Defenders, those civilian workers who realized that they were under Japanese attack and decided to help in the defense, were also

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<sup>4</sup>. U.S. Coast Guard, Report on Merchant Marine Casualties, (Washington: 1950)

granted veteran s benefits.

Unfortunately, merchant mariners then as now were generally forgotten and unappreciated by the Department of Defense. Merchant mariners applied several times for veterans benefits. They were, except for the mariners manning the so called block ships during the Normandy Invasion, turned down. Finally, after a lengthy law suit, the Civilian Military Review Board when pressed to justify its decision, grudgingly granted veterans benefits to World War II merchant mariners.

Interestingly, the response to the board's decision was overwhelming. The benefits that a World War II merchant mariner, now veteran, could expect were minimal. For instance, education benefits which are the bulwark of G.I. benefits. In all cases these had lapsed for the World War II merchant mariners because although the benefits had just been granted, by virtue of the discharge having just been issued, the years of eligibility had lapsed because the constructive discharge date was in August 1945. The majority of these veterans got no more than recognition and perhaps a flag for their coffin. Yet to date over 75,000 have sought the recognition.

In any case this resource that is often under-funded and unappreciated by our nation has been relied upon to provide a necessary service in time of war or national emergency.

Numerous studies have concluded that the best source of sealift is a healthy and robust Merchant Marine.

" The commission believes strongly that the most militarily efficient, cost effective (in comparison with an idle government-owned reserve fleet), and reliable way to provide the majority of the military sealift requirement now and in the future is through an active United States flag merchant marine. The ships should be militarily useful and operating, engaged in peacetime in carrying commercial cargo, and manned by United States crews." <sup>5</sup>.

There is little doubt that the required sealift will have to be provided without a healthy Merchant Marine. The American Merchant Marine is in a serious decline. Even the most optimistic predictions offer no relief for the Merchant Marine in the near future.

In recognition of this situation several programs have been developed to provide the necessary sealift. These include pre-positioned equipment, Fast Sealift Ships, Maritime Pre-positioning Squadrons and the Ready Reserve Force. These programs are designed to provide the sealift necessary at the very beginning of a crises, the surge requirement. In terms of size the most important of these programs is the fleet of ships preserved in a high state of readiness known as the Ready Reserve Force (RRF). The Ready Reserve Force, although a seemingly good idea, has an Achilles Heel in the form of its

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<sup>5</sup>. Commission on Merchant Marine and Defense, FIRST REPORT OF THE COMMISSION ON MERCHANT MARINE AND DEFENSE: FINDINGS OF FACT AND CONCLUSIONS, Washington: September 30, 1987), p. 61

required manning. This paper will explore the problems associated with surge RRF manning.

## CHAPTER II

### THE PROBLEM

Immediately after World War II, the United States had nearly five thousand merchant ships. Many of these ships were stored in the National Defense Reserve Fleet (NDRF) so that they could be used in future national emergencies<sup>6</sup>. The concept was tested twice, during the Korean War and again during the Vietnam War<sup>7</sup>. Under General Agency Agreements these ships were activated and operated primarily by existing steamship companies. The concept worked reasonably well however, it has to be noted that the U. S. Merchant Marine as an industry was significantly different then than it is now.

The U. S. Merchant Marine has steadily declined from it's all time high at the end of World War II to the state that it is in now. At the time of the Vietnam War it still had nearly 900 ships<sup>8</sup> and dozens of active ship operating companies. This relatively healthy industrial climate makes a huge difference in the ability of the Merchant Marine to meet sealift requirements. For one thing, there is lift capacity that can be used to

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<sup>6</sup>. Joint Department of Defense/Department of Transportation Ready Reserve Force Working Group, The Ready Reserve Force: Enhancing a National Asset, (Washington: 23 October 1991), p. 3-1

<sup>7</sup>. Ibid., p. 3-2, 778 NDRF Ships supported U.S. efforts in Korea and 172 NDRF Ships supported the U. S. war in Vietnam.

<sup>8</sup>. Commission on Merchant Marine and Defense, FIRST REPORT OF THE COMMISSION ON MERCHANT MARINE AND DEFENSE: FINDINGS OF FACT AND CONCLUSIONS, (Washington: September 30, 1987), p.12

initially meet the surge requirement through normal commercial means. There was ample time in those cases to find crews for the activated ships, since ships from the NDRF take relatively long time to activate. The NDRF ships when activated were managed by commercial entities under General Agency Agreements.

Another advantage is that the General Agents were large, viable ship operating companies which have an existing resources for personnel management. They also had a much larger pool of active mariners from which they could draw crews for the activated ships.

In addition the two successful tests of the NDRF preceded the rapid technological changes that have taken place in the Merchant Fleet. To a large extent a crew from a World War II vintage ship could be transported to an early 1970's ship without having to undergo a training or adjustment period in order to properly operate the equipment. While it is true that during that period much of the equipment had been improved on, such as bridge equipment, cargo handling gear and the engineering plant. The improvements were incremental and the average Mate or Engineer could learn to cope in a relatively short time. Moving from the ships of the early 1970's, which are the ships that are presently laid up, to commercial ships of today is another matter. The electronic age has reached the bridge, the advent of containerization has completely changed

cargo handling gear and diesel propulsion has replaced steam. For the most part, shore based container handling cranes have completely replaced ships equipment.

"...hastily formed crews must be able to switch from modern diesel propulsion plants and automated cargo handling systems to steam boilers and booms and tackle many decades old. Operating this type of equipment requires expertise that is disappearing from the commercial fleet workforce, and it would take even the most experienced mariners some time for refresher and hands-on training." <sup>9</sup>

As the active U.S. Merchant Fleet continued to decline the Ready Reserve Force (RRF) was developed in 1976<sup>10</sup>. The RRF is part of the larger NDRF, the difference being that the RRF is maintained in a higher state of readiness. The plan is for an RRF ship to be in a state of readiness that will allow it to be activated in 5, 10 or 20 days. Responsibility for the material condition of the RRF lies with the Maritime Administration (MARAD) as does the administration of the General Agency Agreements<sup>11</sup>. The General Agents are responsible for, among other things, providing a crew when the ship is activated. They do this through normal commercial means which in this case requires them to have agreements with several maritime unions representing the various categories of mariner.

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<sup>9</sup>. Jerome A. Peschka, Jr., "MANNING THE FOURTH ARM OF DEFENSE: TIME TO RESURRECT THE U.S. MARITIME SERVICE?", Unpublished Research Paper, U.S. Naval War College, Newport, RI: 1986.

<sup>10</sup>. Joint Department of Defense/Department of Transportation Ready Reserve Force Working Group, p. 3-3



Crews for the RRF come from excess that exists under normal circumstances in the active commercial fleet. Under normal conditions there will be more crewmembers in the maritime workforce than there are billets. The excess is required to allow for training, people changing jobs, etc.. The size of the workforce will seek a certain level expressed as a people to billet ratio. Past experience with wars has shown that a lower people to billet ratio can be planned on in times of national emergency. This means that in transitioning from a peacetime to emergency conditions the same manning pool can fill more billets. The number of additional people made available because of this transition can be quantified by the difference between the normal ratio and the reduced emergency condition ratio. These mariners will be available to man activated ships.

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As the size of the active Merchant Fleet has decreased the size of the RRF has increased to provide for the needed surge sealift. Therefore, as the pool of available merchant mariners from the commercial fleet has decreased, the requirement for manning the RRF has increased. Numerous studies have indicated skepticism that there are enough mariners to man the RRF<sup>12</sup>. Added to this quantitative problem is the previously mentioned qualitative one brought on by considerable changes in technology aboard modern merchant ships.

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<sup>11</sup>. Ibid., p. 3-5

At present the RRF is made up of 96 ships. Existing plans call for expansion to 144 ships<sup>13</sup>. In its current condition the commercial fleet will be unable to provide the crews needed.

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<sup>12</sup>. Among these are, The Navy Merchant Marine Manpower Study and The First and Third Report of The Commission on Merchant Marine and Defense.

<sup>13</sup>. Presearch Incorporated, CREWING THE MERCHANT MARINE FOR MOBILIZATION, (Washington: October 10, 1990), p. 11.

### CHAPTER III

#### RE-DEFINING THE PROBLEM

Desert Shield/Desert Storm provides an excellent case study to analyze all aspects of the performance of the RRF including manning. From it's creation in 1976 until the Gulf War in 1990 the RRF was never exercised according to plan<sup>14</sup>. The original plan was to activate ships on a periodic basis. The thought was that these periodic activations would insure that efforts to preserve the material condition of the vessels were effective. Not only were activations not done often enough to achieve material readiness, but crew availability was never fully validated.

Each time an RRF vessel was activated a crew was provided. Force planners thought, no problem! Well, not really. It is one thing to come up with one crew to man one ship and something entirely different to produce 70 or 90 crews in five days. In addition, when looking back at the activations done prior to the Gulf War, there seems to be cases where the same key people participated in many activations. The same Chief Engineers, First Assistant Engineers, Masters and Chief Mates appear in enough activations to make coincidence suspect. Often individuals were sought out because they were experienced in the

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<sup>14</sup>. Presearch Incorporated, CREWING THE MERCHANT MARINE FOR MOBILIZATION, (Arlington, Virginia: January, 1991), p. F-2.

peculiarities of RRF activation<sup>15</sup>.

The suspicion that there were not enough merchant mariners available led to studies of the problem. That a shortfall existed was affirmed in several studies<sup>16</sup>. Unfortunately, confirmation of the problem by a large scale activation was economically unfeasible. Administrative, large scale tests of the activation process were done through command post exercises and the results of these appeared suspect.

The activation process is the responsibility of MARAD. When requested by the Military Sealift Command (MSC), MARAD begins the process of taking the ship from its lay up berth and doing all the things necessary to make it ready for sea. This includes providing a crew. Most of these things are done through the General Agent or Contracted Ship Operator. The Agent or Operator then requests the various unions to provide people to fill billets in accordance with contracts already in place<sup>17</sup>.

During command post exercises this process is simulated by individuals playing the role of the Agent or Operator. When it comes time to provide a crew they call the unions, make the

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<sup>15</sup>. Author's observations during ship activation 1985.

<sup>16</sup>. See note 12.

<sup>17</sup>. Joint Department of Defense/Department of Transportation Ready Reserve Force Working Group, p. 4-3

request and record the response for the report. Predictably the usual response is in the affirmative. In Exercise "Breakout 89" an attempt was made to confirm the results by requesting the crews names, phone numbers and addresses<sup>18</sup>. Confirming the availability of the individuals was a time consuming and labor intensive task with disappointing results. Even this doesn't tell the whole story; since, the willingness of an individual to respond affirmatively to a paper exercise is probably much different than the willingness to give up the chance for better employment and take an arduous job of unspecified duration.

Most of the maritime labor force is unionized. The choice of jobs generally is prioritized on the basis of seniority in the union and length of time since the last assignment. In some unions he is issued a card when eligible for employment after his last assignment. This card entitles him to "bid" on announced jobs that he is eligible for up until it expires, with the oldest card having the first priority for employment. A card close to its expiration date is referred to as a "killer card". Any available mariner will likely say yes to hypothetical employment on an RRF ship, especially since it is the unions stated policy to support national defense efforts. Individuals may have a considerable disincentive to take a real job on an RRF ship, since previous experience with RRF ships is

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<sup>18</sup>. Presearch Incorporated, CREWING THE MERCHANT MARINE FOR MOBILIZATION, (Arlington, Virginia: January, 1991), p. III-19.

that they are activated for short periods and then laid up again. There is no way to tell if the job is for two weeks or six months. If it is a job of short duration he will have sacrificed his "killer card", high priority for a job, for little financial gain. The tendency is that a mariner will say "yes" to a hypothetical RRF job, but "no" to the real thing.

In Operation Desert Shield/Desert Storm the system was certainly tested. Seventy eight ships were activated. Of course 78 crews were provided. Looking at the whole activation, the temptation is to think that there isn't much of a problem, except that mustering the 78 crews pretty much exhausted the supply of available mariners. This is a reasonable conclusion supported by the fact that to reach this number of seamen some extraordinary measures were necessary. These were measures that allow mariners on the fringe of the industry to reenter. For instance Deck Officers who were in all aspects qualified to report for duty except that they needed to renew their radar observer endorsement were given extensions on their endorsement. This allowed them to miss one to three days of training in a radar simulator facility. There are other measures which I would call "desperate" that could be used to increase the number of mariners available, these were not used.

Measures taken to allow a few more mariners to fill billets were relatively benign. The time requirement for renewal of

Radar Observer endorsements on deck officer licenses was extended, obviating the need for those officers to attend radar schools before reporting for duty. Substituting two Third Mates for a Second and Third Mate was allowed. These measures increased the supply by a small amount and were relatively risk free in terms of decreased safety<sup>19</sup>.

More drastic measures that are possible but weren't considered necessary include such things as immediate license examinations for the first class at the State and Federal Academies. Underclassmen at the Academies could be tested, issued documents and sent to unlicensed billets. Temporary license upgrades could be issued with half the required seetime and without examination, as was done during the Vietnam War. These and other measures expand the available manpower, but are closer to desperation measures<sup>20</sup>.

Desert Shield/Desert Storm as a case study provides a good indication of the maximum manning that can be provided for the RRF by the Merchant Fleet that existed in 1990. However, it is not as simple as relating the size of the 1990 manpower pool to the 78 ships activated for the Gulf War. The activation went

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<sup>19</sup>. U.S. Coast Guard, After Action Report for Ready Reserve Fleet[sic] Vessel Activation Inspections, (Washington: May 28, 1991)

<sup>20</sup>. Presearch Incorporated, CREWING THE MERCHANT MARINE FOR MOBILIZATION, (Arlington, Virginia: January 1991), pp.VIII-8 and VIII-9.

through phases. The first phase activated 44 ships<sup>21</sup>, and at the end of that phase there was already concern that there would not be sufficient crewmembers. In other words, the supply of available merchant mariners was exhausted during the first phase. To find crews for the next 34 ships required considerable tree shaking and bush beating. Therefore, the crucial relationship is the size of the manpower pool supported by the Merchant Fleet of 1990 to the size of the manning pool required by the first 44 RRF ships activated.

In 1990 there were about 24,000 mariners actively engaged in sailing on commercial ships. In August of 1990 there were 368 privately owned, active, deep draft, oceangoing ships in the U.S. Merchant Marine<sup>22</sup>. These ships contained 9,704 billets<sup>23</sup>. This gives a person to billet ratio of 2.5:1, which is a little higher than previously predicted.

Previous studies assume that the maritime workforce will settle out at a lower person to billet ratio, typical of these is the conservative ratio of 2.0:1.

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<sup>21</sup>. Joint Department of Defense/Department of Transportation ready Reserve Force Working Group, p. 6-1

<sup>22</sup>. U.S. Department of Transportation, Maritime Administration, U.S. Merchant Marine data sheet, Status as of August 1, 1990, pp. 2-3.

<sup>23</sup>. Ibid., p. 5, There are 12,918 total oceangoing billets, minus the MSC Civil Service Ship billets leaves 9,704 in the U.S. commercial fleet.



"During peacetime, the seagoing workforce reacts to the availability of billets and, historically, stabilizes at about 2 mariners per billet. The opportunities for seagoing billets set the size of the workforce, which is regulated principally by the size of the active merchant fleet. In general, for each billet lost, the active maritime workforce declines by 2 seamen.<sup>24</sup>"

The surplus of seaman as compared to the number of billets available is caused by the need for seamen to be unavailable because of sickness, training, changing jobs, vacation and other disruptions existent in any industrial workforce. During periods when mobilization was taking place it was assumed that the person to billet ratio could be lowered to about 1.5:1<sup>25</sup>

The difference between these two ratios can be expressed as the ratio .5:1, indicating that .5 mariners per available billet should be available to man other ships when activation begins. Using the 1990 number of billets of 9,704 there should have been 50%, or 4,852 available for the first 44 RRF ships.

Looking at the people side rather than number of billets the difference in the ratios is between the 2.0 people in peacetime and the mobilization figure of 1.5 people, indicating a difference of 25%. This reasoning indicates that 25% of

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<sup>24</sup>. The Commission on Merchant Marine and Defense, FIRST REPORT OF THE COMMISSION ON MERCHANT MARINE AND DEFENSE: FINDINGS OF FACT AND CONCLUSIONS (Washington: September 30, 1987), p. 34

<sup>25</sup>. Department of the Navy, chief of Naval Operations, Strategic Sealift Division (OP-42), NAVY MERCHANT MARINE MANPOWER STUDY, (Washington: 2 July 1986), p. iii

active mariners would be available to man activated merchant ships. Again using the 1990 number of about 24,000 active mariners there should have been about 6,000 mariners available to man the first 44 RRF ships.

The reality is that it was difficult to provide the approximately 1,400 mariners needed for the first 44 RRF ships. These ships were not all activated at the same time, but were spread out between August 10 and September 22, which helped the situation. The first group of ships represents the limit that the manpower pool supported by a 1990 size fleet can be expected to man in a short time frame activation. The reason for the difficulty lies more in the inadequacy of the process of distributing manpower than in an absolute shortage of people.

## CHAPTER IV

IS THERE A RELATIONSHIP BETWEEN THE CIVILIAN MANNING POOL AND THE SIZE OF THE RRF THAT CAN BE MANNED BY EXISTING MEANS?

Desert Shield/Desert Storm should provide some empirical data for future planning. It is the only realistic exercise of the system that is available, since all previous activations occurred before the RRF was created. Unfortunately it doesn't validate the previously held assumptions about available manpower. On the surface the good news is that the size of the actively sailing manpower pool is larger than predicted. The bad news is that it is much more difficult to move the excess into the RRF when needed.

On further consideration it may not be so much that the assumptions are invalid, but that they were deduced from a different set of circumstances and applied in a very broad manner. The circumstances that can be used to deduce particulars about Merchant Marine manning are World War II, Korea and Vietnam. These differed in many important ways. First, they lasted long enough for the situation to settle out, and there was actual combat going on when much of the merchant build up was happening. In August of 1990, it was uncertain whether there would be a war or if Saddam Hussein would back down. Second, in World War II, Korea and Vietnam there was

pressure in the form of the military draft which tended to encourage many to perform some form of service, and active service in the Merchant Marine was in those cases a basis for exemption from military draft. In the case of World War II, there were active government programs to recruit people into the Merchant Marine. Qualified draftees were often given the option of volunteering for duty in the Merchant Marine.

Another problem with previous broad brush attempts to make assumptions about availability is that they tend to view merchant mariners as a fungible commodity. The merchant mariner of 1990 had many disincentives to taking a job on an RRF ship. Since the industry is shrinking there was an abundance of mariners chasing too few jobs. What this means to a mariner who is seeking a job through the hiring hall process is that he or she has to wait longer before having a chance to successfully bid on a job in the hiring hall. Therefore, the mariner wants to get a job that will provide for employment for the longest time possible. An RRF ship is not a good choice from an economic standpoint. No one knew in 1990 if a job on an activated RRF ship would last for a week or a year.

Included in the pool of available mariners were those with permanent jobs and were on rotation off the vessel. Many billets have two people rotating alternatively into it. This is necessary with modern commercially efficient ships that spend

very little time in port. These off duty mariners were certainly dissuaded from taking a job on an RRF ship. Permanent jobs in a shrinking industry are prized and taking a job on an RRF ship would certainly put ones permanent job in jeopardy.

Working conditions on an RRF ship also tend to dissuade mariners from taking the jobs. It is no secret in the industry that the material condition of the ships is poor. Living conditions in terms of quarters, lack of air conditioning etc. are also sub-standard. In addition the difference between the equipment on a commercial ship and one of the RRF ships exacerbates the problem, i.e., containers and diesel propulsion on the former and breakbulk cargo gear and steam engines on the later.

The size of the pool of actively sailing mariners is probably somewhat inflated. The number of available billets has been shrinking rapidly and the number of actively sailing mariners has not yet caught up. This is because many eventual "leavers", those who leave the Merchant Marine and find employment elsewhere, have not yet decided to leave or found other employment<sup>26</sup>.

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<sup>26</sup>. Telephone conversation with Bruce Carlton, Director of the Office of Maritime Labor and Training, Maritime Administration, Washington, D.C., 3 June 1992. His term for this phenomena was "The hanging around the union hall effect." In times of a shrinking fleet mariners will continue to hope to get maritime employment through the union until they find other employment.

A relationship definitely exists between the size of the civilian manning pool and the number of available billets on active ships with the excess being available to man the RRF. There appears to be more mariners per billet than previously assumed, even considering that the manpower pool is still seeking its level. The assumption that a large portion of available excess manpower will find their way to the RRF in a short time is flawed. There are more people than was thought but less of them get to the ships because of the distribution procedure.

Using the rough numbers from Desert Shield/Desert Storm the lesson is that with an excess manpower pool of about 12,000<sup>27</sup>, forty four ships representing about 1400 billets can be manned in 40 days. Given a few months 79 ships with almost 3000 billets can be manned. Because the existing system was taxed to reach this level, system improvements and/or alternative means are needed for the remainder of the RRF.

The size of the active fleet was predicted to continue to decline to just over 200 ships by the year 2000. This decrease in ships would be accompanied by a decrease in seagoing

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<sup>27</sup>. As previously stated the total of actively sailing mariners was about 24,000. This minus the total of active billets leaves approximately 18,000 in the excess manpower pool.

workforce to about 12,000<sup>28</sup>. This progression is well underway. There is a serious possibility that three companies, American President Lines, Lykes Lines and Sealand will be foreign flag operations by 1995.<sup>29</sup> This action would reduce the fleet by 92 ships and 2,475 billets.<sup>30</sup>

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<sup>28</sup>. The Commission on Merchant Marine and Defense, FIRST REPORT OF THE COMMISSION ON MERCHANT MARINE AND DEFENSE: FINDINGS OF FACT AND CONCLUSIONS (Washington: September 30, 1987), PP. 32-34

<sup>29</sup>. Telephone conversation with Mr Bruce Carlton, Director of Maritime Labor and Training, Maritime Administration, June 3, 1992

<sup>30</sup>. U.S. Department of Transportation, Maritime Administration, U.S. Oceangoing Merchant Fleet Operators and Crewing Levels, (Washington December 1990) pp. 4, 22 and 33

## CHAPTER V

### WHAT ADDITIONAL RESOURCES EXIST?

The skills and knowledge necessary to operate a merchant ship are specialized. Some of them obviously can be found in other professions. Navigation, seamanship and marine engineering skills can also be found on military vessels. Other industries have closely related skills. The transfer of skills from other industries to the activated RRF have been proposed; however, these resources require additional training and should be considered after the entire supply of available personnel with existing Merchant Marine skills has been exhausted.

The number of people who have Merchant Marine skills, as evidenced by valid licenses or documents, exceeds the number of actively sailing mariners by a considerable margin. Licenses are required to be renewed at five year intervals. Most mariners who have achieved an upper level license, unlimited gross ton for deck and unlimited horsepower for engine, continue to renew it even after leaving the industry.



**TABLE 1**  
**UPPER LEVEL LICENSES HELD**

DECK		ENGINE				
			TOTAL	STEAM	MOTOR	STEAM/MOTOR
MASTER	5046	CHIEF ENG.	4280	1795	1251	1234
CHIEF MATE	1117	FIRST ASST. ENG.	1662	1021	324	317
SECOND MATE	1579	SECOND ASST. ENG.	2292	1454	359	479
THIRD MATE	3270	THIRD ASST. ENG.	4621	393	255	3973
TOTAL	10,974		12,855			

Data from U.S. Coast Guard database. <sup>31</sup>.

If not renewed they become invalid and are lost. Unlimited licenses represent an achievement for which a mariner can be justifiably proud. Most mariners will go to considerable inconvenience rather than lose it. The Coast Guard tracks these renewals and a comparison of license holders with actively

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<sup>31</sup>. U.S. Coast Guard, Seaman's Records Database, May 1992

sailing mariners leads to a quantification of the additional pool of licensed merchant marine officers that is potentially available<sup>32</sup>.

There are serious obstacles to ever using this pool as a resource for manning the RRF. First, individuals who have left employment in the Merchant Marine take up and become established in employment ashore. Once established in another field they are very reluctant to return to sea. Furthermore, unlike military reserve counterparts, there is no provision that their jobs will be held for them until the mobilization is over. Also, depending on the skill level attained, as evidenced by license held and years worked, and time away from the Merchant Marine, they may require refresher training or may need some time for their skills to be refreshed.

The number of unlicensed seamen in excess of those actively sailing can only be estimated at present. The documents that these seamen hold have up until now been issued without a renewal requirement. Consequently, records include all documents issued. The Oil Pollution Act of 1990 requires that seaman's documents also be renewed at five year intervals. In a few years the Coast Guard will be able to track unlicensed seamen with the same accuracy as with licensed officers.

A subset of the licensed Merchant Marine officers no longer

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<sup>32</sup>. Ibid.

actively sailing, but keeping their licenses current, are the Naval Reserve Merchant Marine Reserve officers who are no longer sailing. This program includes deck, engine and radio officers who also hold Naval Reserve commissions. The purpose of the program is to provide officers for merchant ships who are knowledgeable of naval tactics and communications and can facilitate operation with U.S. naval forces when necessary. The concept is for these active sailing officers to continue sailing on their merchant ships in order to provide this knowledge rather than be mobilized. The program did not envision ever mobilizing these officers unless there was a specific need on an individual basis. Since the size of the active Merchant Fleet has declined many of these 3,600 officers are no longer actively sailing or are sailing part-time.

By comparing the data base containing the files of these reservists with the Coast Guard seaman's records, it was determined that nearly 1600 of these officers are no longer sailing.

**TABLE 2**  
**LICENSES HELD BY USNR MMR**

DECK		ENGINE		RADIO
MASTER	190	CHIEF	67	10
FIRST	130	FIRST	67	
SECOND	179	SECOND	124	
THIRD	925	THIRD	1157	

Source: Merchant Marine Program Database. <sup>33</sup>

There are not enough of these reserve officers to man the entire RRF (96 ships at present with plans for 144). There are a sufficient number to provide a considerable portion of the ships with officers. Unfortunately, the database could not provide a listing of the licenses held by this group in terms of grade and specialty. The licenses held are probably heavily concentrated in the junior categories, but there are a number of senior mariners no longer sailing. Even if a dozen ships could be manned with this resource it would help. There are problems associated with trying to use this resource to man part of the RRF. These have been discussed when this plan has been proposed

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<sup>33</sup>. Commander, Naval Surface Reserve Force, Merchant Marine Program, Data Base, (New Orleans: May 1992).

in the past<sup>34</sup>.

The major objections to the proposal center around the concept that the Naval Reserve Merchant Marine Reserve (USNR MMR) was not meant to be mobilized<sup>35</sup> or that an RRF ship will be either a Navy Vessel with Navy manning standards (much larger crew) or a commercial vessel with a civilian crew. This objection is losing its validity since with the shrinking commercial seagoing job market fewer and fewer of these officers are actually sailing. Many of the ones who are sailing are doing so less than full time. Those who are in the pool of actively sailing mariners will be accomplishing their mission by staying in a billet on a commercial ship, hopefully one involved in the sealift effort. The rest, and it seems to be a large portion, cannot easily fulfill that mission. As discussed, it is not easy to get back into the industry and if they have jobs ashore they returning as civilians will lose them, unlike reservists.

The objection that an RRF ship converted to a Naval Vessel, for the purpose of being able to assign naval personnel to man it, would require manning to naval standards (and therefore a

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<sup>34</sup>. Stuart Keiller and Stephen V. McBrien, STRATEGIC SEALIFT, MANNING THE READY RESERVE FORCE Merchant Ships with UNITED STATES NAVAL RESERVE PERSONNEL, Unpublished Research Paper, U.S. Naval War College, Newport, RI: 1991.

<sup>35</sup> U.S. Navy Dept., MERCHANT MARINE RESERVE, U.S. NAVAL RESERVE PROGRAM, OPNAVINST 1534.1B (Washington: 1992), pp. 6-7.

larger crew) is one of form over substance. Doctors recalled to the military don't change their procedures unless there is a valid reason to do so. If the ship could accomplish its mission with a 40 man civilian crew then there is no reason why it would be any less effective with 40 equally qualified navy personnel just because it was painted grey.

The problems with the proposal can be addressed by operating those ships as public vessels while maintaining a manning scale that is very close to what was on the certificate of inspection, when it was an inspected vessel. The same level of safety would be provided if each reservist assigned held, in addition to any military qualification, a Merchant Marine qualification at least equal to that called for on the certificate of inspection.

Of course the present program has no unlicensed personnel. Plans for an enlisted portion of the USNR MMR have been proposed before and would not present a great obstacle, especially if mobilization billets in the form of RRF ships were available. To be effective, both the officers and enlisted should be Selected Reserve (SELRES) drilling regularly to train for their mobilization billet, an assigned RRF ship. This would only require a few thousand reserve billets total, which could come from other reserve functions that proved to be not as crucial during Desert Shield/Desert Storm. The USNR MMR program has the

added benefit of an existing infrastructure in the form of four headquarters units strategically located, which would facilitate assumption of a new mission.

There are still a great number of qualified mariners who are no longer sailing and are not members of the reserve. This is a resource that is extremely difficult to tap. First, there is little incentive for them to return to the Merchant Marine. If they have been away from the seagoing profession for any length of time they usually have established suitable careers ashore. Second, there is no good way at present to contact them. Third, unlike their reserve counterparts these mariners don't enjoy any of the reservists benefits. Chief among these for the merchant mariner is the right to return to his or her old job when de-mobilized.

To use this pool of qualified, but no longer sailing mariners rapidly, a program is needed to get them back into the industry. Several programs have been proposed and several are currently under consideration. The most expensive and complex of these programs includes provisions for training new mariners and upgrading the skills of the members.

In any case the figures show that resources exist in the form of an untapped manpower pool. In the short term very little of this pool will be available using current personnel

distribution procedures. An additional program is necessary to make use of this additional manpower.



## CHAPTER VI

### MATCHING MANPOWER TO NEED

Was there an optimal match of skilled people to billets in the Desert Shield/Desert Storm activation? To be optimal the skills of the entire pool of mariners available for the RRF would have to be examined and several factors would have to be considered. As a minimum familiarity with the equipment or type of equipment, time served in various billets vice highest license or rating held and recency of service would have to be considered. Such a review was beyond what could be accomplished in the short time frame available and is beyond the capabilities of normal manning procedures.

The Certificate of Inspection (COI) issued by the Coast Guard details the minimum number and qualifications required for the safe operation of the ship. The manning contract has more crewmembers than the COI. This is especially true in the stewards department since these are not included in the COI. Full manning on activation then would be indicated by the number and grade of licensed and documented crewmembers required by the contract. While there was some delay in getting full crews on ships there were also some skill mismatches.

"The variety of skill mismatches was even more significant than delays in acquiring full crews. For example, some seafaring unions sent diesel engineers with little or no recent experience in steam plants to steam-powered ships. Deck officers and able-bodied seamen experienced only on container ships were dispatched to serve aboard breakbulk ships with extensive cargo-handling gear. Under ordinary

circumstances such mismatches would not be significant, but under the tight schedule of RRF activations the crews had little time or opportunity for familiarization and on-the-job training."<sup>36</sup>

The existing procedure for assigning crews to ships is that the General Agent or Ship Operator notifies the unions that he has previously made agreements with. He requests the number of seamen with the proper qualifications required. The unions then fill the jobs through the normal hiring process. In many cases ship operating companies have permanent employees, this is particularly true of the senior positions, which they assign to billets with union concurrence. Other jobs are filled on an "as needed" basis which involves some variation of the hiring hall. The jobs are announced and members who are qualified can bid on the jobs based on their seniority. Considerations are seniority in the union and length of time since last employment. Members in the highest seniority category who have been ashore longest generally get first choice.

The union hiring system serves the industry well in normal circumstances. It provides for a fair distribution of available jobs while allowing some management control of senior personnel. In general the most desirable, most demanding and highest paying jobs go to the most experienced personnel. In any case, only personnel with the proper Coast Guard credentials are dispatched

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<sup>36</sup>. Joint Department of Defense/Department of Transportation Ready Reserve Force Working Group, p. 1-8

to the ships.

Under conditions of rapid activation the system is strained to the limit. The very thing that makes the system work in normal times, the desire of the union members to get the most desirable jobs with the most senior, and therefore the most experienced getting them, works to negative purposes during an activation. RRF ships are less desirable jobs and will therefore be passed up by more experienced mariners leaving the jobs for the most junior members. RRF ships are also, at least when they are first activated, the most challenging to the skills of the crew since the equipment is older and has been in an inactive status. This coupled with the widening gulf between the equipment in the active Merchant Fleet and that in the RRF equals an overall situation that is a blueprint for disaster.

Of course some factors in the RRF manning scenario are unavoidable. The personnel distribution system, or lack thereof, doesn't help and may in fact make matters worse. What is needed is a plan to get closer to an optimum match of personnel to billets.

Ideally the crew sent to an RRF ship would be familiar with the equipment or at least the type of equipment on that ship. Familiarity with other crewmembers or crew cohesiveness would also be desirable. Operational familiarity with procedures

peculiar to the activation of an RRF ship would also help in successful crewing. Unfortunately, none of the plans being considered does much to reach the ideal situation.

## CHAPTER VII

### OPTIONS

Several plans to improve the ability to man the RRF have been developed. The proposed plans fall into three general categories. Those that enhance the capability of the existing system, those that provide a larger pool of mariners to draw on and those that will make the activation process easier.

One proposal to enhance the existing system is to establish a Manning Board<sup>37</sup>. This would be a group comprised of General Agents/Ship Managers, representatives of the seafaring unions, Department of Defense and Department of Transportation. The purpose of the board would be to help resolve manning problems as they arose during an activation.

General Agents and Ship Operators are authorized to seek alternative sources of manpower during an activation, if they experience problems crewing their ships. It is difficult to anticipate when the manning problems will begin. When it becomes apparent that problems exist, manning will have already have affected the short timetable required for activation.

In addition there is a potential problem that can only be solved by cooperation between the unions. Some categories of

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<sup>37</sup>. Joint Department of Defense/Department of Transportation Ready Reserve Force Working Group, p. 1-8

merchant mariner are represented by more than one union. Deck officers are represented by the Masters, Mates and Pilots, the Marine Engineers Beneficial Association, District One and the Marine Engineers Beneficial Association, District Two for example. The General Agent or Ship Operator will have an agreement with only one of these groups for that particular category of mariner. At the time of activation, there may not be mariners available from that union to fill all the required billets on that Agent or Operators ship. At the same time one of more of the other unions representing that category of mariner may have additional mariners available; however, there is no mechanism for the Agent or Operator to access these mariners who belong to other unions and in fact he will not be able to do so. A Manning Board would at least be a formalized forum to resolve these types of difficulties.

Other ways of enhancing the existing system could be implemented. Between the time of activation of the first 44 ships and the final activation of the seventy eighth ship, the labor unions were able to make available additional mariners by accessing inactive and retired members. The unions have a good capability of keeping contact with this resource and in the future may be able to determine, in advance, the number who are willing to return to work upon a future activation of the RRF.

One of the most ambitious options to increase the size of

the available manning pool is the development of a civilian merchant marine reserve. The goal of this option is to provide qualified civilian mariners who agree to serve when required. The advantage of the program over other reserve options is that it allows the RRF ships to remain in their civilian merchantman status. A problem with the program that causes some lack of confidence is that there are no provisions for involuntary recall of civilians to serve.

Proposals range from the high cost option where civilian mariners are organized into units and train at regular intervals<sup>38</sup>, to low cost options where qualified mariners are paid a stipend in return for the commitment to serve when required<sup>39</sup>. The proposals considered merely increase the size of the labor pool available to the existing distribution process. They do little to increase the efficiency of that process.

In all three of the options discussed above a provision to guarantee rehire rights for merchant mariners is required<sup>40</sup>. During the RRF activation numerous qualified merchant mariners

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<sup>38</sup>. Department of the Navy/Department of Transportation, PROPOSAL ESTABLISHMENT OF A CIVILIAN MERCHANT MARINE RESERVE PROGRAM, (Washington: February 1987).

<sup>39</sup>. Presearch Incorporated, CREWING THE MERCHANT MARINE FOR MOBILIZATION, (Arlington, Virginia: January 1991), pp. VI-1-VI-5

<sup>40</sup>. Joint Department of Defense/Department of Transportation Ready Reserve Force Working Group, p. 6-13

who were willing to fill billets did not do so because there was no guarantee that their jobs would be available when they returned. There is no way to estimate the effect that this measure would have by itself but it is mentioned in several of the after action reports and is supported by nearly everyone concerned with the manning problem. The effectiveness of the above options would be greatly degraded without the job protection provision.

The use of the Naval Reserve to provide manning for the RRF has been discussed. This proposal has been rejected several times, but may deserve another look in light of the Desert Shield/Desert Storm experience.

Proposals to make the activation process easier include a provision for cadre crews who will maintain the RRF ships while they are laid up and lengthening of the activation times. The cadre crews would be able to keep the ships in much better condition while the ships were idle. The ships that had these crews would essentially be in Reduced Operational Status (ROS). In addition to maintaining the equipment these crews would be required to sail on the ships when they were initially activated, thereby reducing the crewing problem.

The proposal to lengthen the activation time was based on the observation that five day activation times are unrealistic



for some ships. This is based on problems associated with lighting off steam plants from a completely inactive status and problems associated with providing services needed to many ships simultaneously where many RRF ships are kept at a single location. It was also noted that in some cases during the Desert Shield/Desert Storm activation the ships were not really needed in five days, and that eight or ten day availability served the purpose<sup>41</sup>.

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<sup>41</sup>. Joint Department of Defense/Department of Transportation Ready Reserve Force Working Group, pp. 6-6 and 6-7.

## CHAPTER VIII

### CONCLUSIONS

The ability to man the entire RRF as part of the necessary surge sealift requirement is doubtful. Having a large RRF without the capability to provide crews is having a hollow force. The required resource in the form of mariners with at least the minimum qualifications appears to exist, but the mechanism to match it up with the need doesn't exist. Having a 144 ship RRF fleet with no personnel management would be like having a navy nearly one fourth the size of the U.S. Navy without a Bureau of Personnel. No one would seriously propose that would work, yet the RRF was set up with the expectation that excess mariners from the active Merchant Fleet would by their own instincts gravitate to the RRF like so many lemmings.

The reason for the apparent disparity between what was planned and what happened is that the model used for personnel management of the RRF was not based on short term surge requirement, but on past activations that more closely resembled normal longer term changes in fleet size. In past cases there was time for market and other pressures to move manpower to where it was needed. The short time frame required in activating surge shipping will not allow those forces to naturally gravitate to where the work force is required.

Desert Shield/Desert Storm did validate previous

assumptions about manpower when applied to the longer or sustainment phase of sealift. As time went on more seamen became available. Eventually long term programs to make more mariners available and to produce new ones would have come into play.

Normal commercial manning serves the industry well and should be relied on for manning the RRF to the extent that it can. Desert Shield/Desert Storm lessons learned indicate that the 1990 commercial manpower pool using the commercial process has the capacity to provide crews for 44 ships in the short term. The capacity of commercial manning procedures to provide RRF crews should be monitored and the ships that will be manned using that method identified ahead of time. Those ships whose equipment most closely resembles that found in the commercial Merchant Fleet should be the first priority for manning using normal commercial means.

The first task is to develop the method of determining how much of the RRF can be manned by commercial means. The recent example shows that a fairly small percent of the active workforce was available in the short term with a substantially larger number becoming available at the four to five month point. Since Desert Shield/Desert Storm provides the best data that we are likely to have for the foreseeable future, it should form the basis of future determinations. MARAD, which

constantly tracks this data with the cooperation of the Coast Guard, should try to quantify the number on a periodic basis and decide which ships will be assigned crews from commercial sources.

Existing manning procedures can be enhanced. A substantial number of additional mariners became available a few months after the activation started when the need was firmly established. The labor unions were responsible for finding these additional people from among their retirees and other former seagoing personnel. They have a vested interest in meeting the manning need and the resources to keep track of their own members and should continue to cooperate with the government in times of crises. An effort should be made to plan for the next contingency by working with the unions to identify the additional manning sources ahead of time so that mariners can be available in the early phase of a future activation.

The most obvious difference between the RRF and any other hardware resource that is held in a ready reserve status is that the people to operate the equipment are not pre-assigned to, or trained on the equipment. Some sailing personnel work under conditions where two people fill a billet and they rotate on and off the ship. This is particularly true of senior positions. This rotation of personnel would be nearly impossible for any government agency to track with any accuracy. Unions keep track

of their members as part of their normal course of business and have the talent, resources and procedures to do so. An effort should be made to explore the possibility of having personnel who are on a rotation off their ships, starting with the most senior billets, pre-assigned to RRF ships by their unions.

The portion of the RRF that cannot be manned by normal commercial means will have to be manned by some other means. It is doubtful that any one proposal can solve the entire problem, but collectively several programs can. A Civilian Reserve program, in one of its forms, is a promising option in satisfying this requirement. The programs proposed so far, however, have a common deficiency in that they rely on the normal commercial personnel distribution process that caused problems in the past. To efficiently match manpower with requirements, the individuals have to be pre-assigned to the billets they will fill. Additionally, the value of any training received is greatly enhanced when it is equipment specific. There is the further benefit of crew cohesion, if even a part of the crew trains together.

Efforts to enact the legislation that will protect the jobs of merchant mariners who return to the seagoing profession in a time of mobilization should be continued. This provision is a key element in several individual programs to enhance the manpower available for the RRF.

Existing reserve programs should be revisited and evaluated even if they can man only a small portion of the RRF. Using an existing resource in this manner will reduce the size and therefore, cost of other programs that require initiation.

The system of tracking the manpower pool can be improved upon. The tracking of the unlicensed will be improved in the near future as the Coast Guard fully implements the five year renewal provision for seaman's documents. It is still difficult to obtain accurate data for emergency manning purposes. This is because the systems were designed with other purposes in mind. Navy, MARAD and Coast Guard all presently have databases. A cooperative effort should be made to coordinate this data.

Other options should be pursued, especially the no cost ones like lengthening the activation times on ships where possible. There can be no doubt after the recent experience that there is a problem with manning for the RRF, and it is almost certainly going to get worse. There have been ample studies but little action. Yes, Virginia, there is a Santa Claus - but, No, Virginia, he will not bring crews for your RRF ships.47

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